OK TO ENTER: /ASG/

Applicants: Hirvonen et al. Application Serial No.: 10/538,193 Filing Date: April 21, 2001

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## IN THE CLAIMS:

The following listing of claims shows the current status of the claims:

 (Currently Amended) An arrangement for testing a radio device comprising: a waveguide closed at both of its ends; and

comprising a holder arranged to hold the radio device at least partly inside the waveguide in such a manner that at least a portion of the radiating part of the radio device remains outside the waveguide, the at least a portion of the radiating part of the radio device remaining outside the waveguide being entirely inside the holder, wherein the waveguide comprises:

one or more ridges extending along a longitudinal axis of the waveguide, the end of at least one ridge facing the holder being bevelled; and

one coupling inside the waveguide for transmission and reception of a radio-frequency signal by the use of a wideband mode of propagation.

- (Previously Presented) An arrangement as claimed in claim 1, wherein the end of
  the waveguide on the side of the holder comprises one or more pegs made from a conductive
  substance and fastened to the inner surface of the waveguide.
- (Previously Presented) An arrangement as claimed in claim 2, wherein the pegs are in contact with the waveguide only at their ends.
- (Previously Presented) An arrangement as claimed in claim 1, wherein one end of at least one peg is fastened to the same wall of the waveguide as one ridge.
- (Previously Presented) An arrangement as claimed in claim 1, wherein absorption material is fastened to the inner surface of the waveguide at the end on the side of the holder.

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- (Previously Presented) An arrangement as claimed in claim 5, wherein singlelayered or multilayered absorption material is fastened to the inner surface of the waveguide as one or more strips.
- 7. (Previously Presented) An arrangement as claimed in claim 1, wherein the cross-sectional shape of the holder conforms to the external dimensions of the radio device to be tested and that the length of the holder is selected in a manner preventing radio-frequency radiation from propagating out from the end of the holder opposite to the waveguide.
- (Previously Presented) An arrangement as claimed in claim 1, wherein the end of the holder opposite relative to the waveguide is closed.
- (Previously Presented) An arrangement as claimed in claim 1, wherein the holder is configured to hold the radio device inside the waveguide in such a manner that the antenna part of the radio device is inside the waveguide.
- (Previously Presented) An arrangement as claimed in claim 1, wherein the cross section of the waveguide is selected according to the desired frequency range to be tested.
- (Previously Presented) An arrangement as claimed in claim 1, wherein the arrangement comprises an electric or magnetic coupling of the radio-frequency radiation propagating in the waveguide to a measuring device.
- (Previously Presented) An arrangement as claimed in claim 1, wherein the coupling is implemented by means of a probe, loop or iris.
- (Previously Presented) An arrangement as claimed in claim 1, wherein the holder comprises small openings at the keys of the radio device to be tested.

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- 14. (Previously Presented) An arrangement as claimed in claim 1, wherein to the radio device to be tested is coupled a control signal that is transferred to the device by means of a cable, and that the holder comprises a lead-in for the cable.
- (Previously Presented) An arrangement as claimed in claim 1, wherein the holder is detachably attachable to the waveguide.
- 16. (Previously Presented) An arrangement as claimed in claim 1, wherein the waveguide comprises an opening and fastening means for the holder.
- 17. (Currently Amended) A method of testing a radio device, wherein the radio device to be tested is mounted by means of a holder at least such that the radio device is held partly inside a waveguide closed at both of its ends, the method comprising:

generating a wideband mode of propagation in the waveguide by means of at least one ridge extending along a longitudinal axis of the waveguide, the end of at least one ridge facing the holder being bevelled; and

transmitting and receiving radio-frequency signals by using the wideband mode of propagation between the radio device and a coupling installed in the waveguide, at least a portion of the radiating part of the radio device remaining outside the waveguide, the at least a portion of the radiating part of the radio device remaining outside the waveguide being entirely inside the holder.

- 18. (Previously Presented) A method as claimed in claim 17, wherein the coupling adapts the radio-frequency signal propagating in the waveguide to a coaxial cable connected to a radio frequency measuring device.
- (Previously Presented) A method as claimed in claim 17, further comprising transmitting and receiving radio-frequency signals between the radio device and at least one loop

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disposed in the waveguide, the loop transferring signal energy to a measuring device operationally coupled to the loop.

- 20. (Previously Presented) A method as claimed in claim 17, further comprising transmitting and receiving radio-frequency signals between the radio device and at least one probe disposed in the waveguide, the probe transferring signal energy to a measuring device operationally coupled to the probe.
- (Previously Presented) A method as claimed in claim 17, further comprising performing the calibration of the test equipment by means of a reference unit having a grounded antenna circuit.
- 22. (Previously Presented) A method as claimed in claim 17, wherein one or more pegs made from a conductive material are fastened to the inner surface of the waveguide at the end of the waveguide on the side of the holder.
- 23. (Previously Presented) A method as claimed in claim 17, wherein the frequency area to be tested simultaneously comprises at least two frequency bands intended for mobile telephones.